6. The method according to claim 1 wherein said immunoglobulin chains are expressed from one or more different libraries.

H3

7. The method according to claim 1 wherein said anti-human antigen receptor is a tumor antigen receptor.

8. The method according to claim 7 wherein said tumor antigen receptor is specific for the human 17-1A antigen.

10. The method according to claim 1, wherein said selecting steps comprise:

a first step:

(i) binding a display vehicle expressing an anti-human antigen receptor to a target human antigen selected from the group consisting of:

H4

(a) an immobilized target antigen or a fragment thereof;

(b) cells expressing the target human antigen or a fragment thereof where the cells are optionally labeled; and

(c) a soluble target human antigen or a fragment thereof, the target human antigen being optionally labeled;

a second step selected from the group consisting of:

(ii) removing by washing off the display vehicles that are not bound to (a) or (b) and subsequently eluting the display vehicles that are bound to (a) or (b);

(iii) positively enriching the target human antigen-bound display vehicles from the suspension of cells expressing the target human antigen (b) or from the target human antigen in (c);

display vehicles comprising the desired anti-human antigen receptor bound to the target human antigen being optionally multiplied by replication and subjected to further rounds of in vitro selection steps (i) to (iii).

13. The method according to claim 1 wherein said selecting comprises determining a suitable combination of VH and VL immunoglobulin chains by steps comprising,

H5

(a) testing one and the same VH chain in combination of a variety of different VL chains for binding to said target human antigen; or

(b) testing one and the same VL chain in combination with a variety of different VH chains for binding to said target human antigen.

14. The method according to claim 1 further comprising the steps of obtaining, after selection, the suitable human VH and VL chains or the corresponding nucleic acids, and fusing said chains or the corresponding nucleic acids to: (a) the same or other VH or VL chains or the corresponding nucleic acids, (b) immunoglobulin constant regions of heavy (CH) or light chains (CL) or parts thereof or the corresponding nucleic acids, or (c) non-immunoglobulin chains or the corresponding nucleic acids, respectively.

H6

16. The method according to claim 1 further comprising the steps of obtaining, after selection, the human VH and VL chains and physically linking said chains to non-proteinous pharmaceuticals and/or other biologically active molecules.

H7

17. The method according to claim 1 wherein said VH or VL chains are expressed from nucleic acid sequences that are the result of the RT-PCR amplification of mRNA derived from essentially unprimed mature human B-lymphocytes.

H8 Sub A1

18. An anti-human antigen receptor obtained by the method according to any of the methods of claims 1, 14, 15 or 16.

H9 Sub A1

19. The anti-human antigen receptor according to claim 18 which is an antibody or a fragment thereof.

H10 Sub A2

21. The anti-human antigen receptor according to claim 19, said anti-human antigen receptor being specific for the native human 17-1A antigen.

H11 22. The anti-human antigen receptor according to claim 18 wherein said VH is nucleotides 1 to 381 of Seq. ID NO: 143 and said VL chain is nucleotides 1 to 321 of Seq. ID No: 141.

J3 H12 28. An anti-human antigen receptor, said receptor being characterized in that it comprises a human VH chain and a human VL chain that have been functionally rearranged, said receptor being specific for the native human 17-1A antigen.

H13 31. The anti-human antigen receptor of claim 28 recognizing an epitope of the extracellular domain of the 17-1A antigen said epitope comprising at least one amino acid sequence selected from the group consisting of SEQ ID NOs: 29, 32, 34, 35, 80, 81, 98, 100.

H14 32. The anti-human antigen receptor of claim 28, wherein the VH chain comprises at least one CDR of one of the following two sequences shown in Fig. 7 (nucleotides 1 to 381) and Fig. 8 (nucleotides 1 to 339) and/or the VL chain comprises at least one CDR of the following two sequences shown in Fig. 6 (nucleotides 1 to 321)and Fig. 9 (nucleotides 1 to 321).

H15 34. The anti-human antigen receptor according to claim 18, said anti-human antigen receptor comprising a VH chain or at least one CDR.

H16 36. The anti-human antigen receptor according to claim 18, said receptor comprising a VL chain or at least one CDR.

H17 50. A pharmaceutical composition according to claim 45 wherein said CDR is CDR3.

51. A pharmaceutical composition according to claim 46 wherein said CDR is CDR3.

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52 A pharmaceutical composition according to claim 47 wherein said CDR is CDR3.

**Add claims 53-64 as follows.**

53. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 28, comprising a VH chain and a VL chain and a pharmaceutically acceptable carrier.

54. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 29, comprising a VH chain and a VL chain and a pharmaceutically acceptable carrier.

55. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 31, comprising a VH chain and a VL chain and a pharmaceutically acceptable carrier.

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56. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 32, comprising a VH chain and a VL chain and a pharmaceutically acceptable carrier.

57. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 28 comprising at least one CDR and a pharmaceutically acceptable carrier.

58. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 29 comprising at least one CDR and a pharmaceutically acceptable carrier.

59. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 31 comprising at least one CDR and a pharmaceutically acceptable carrier.

60. A pharmaceutical composition comprising an anti-human antigen receptor according to claim 32 comprising at least one CDR and a pharmaceutically acceptable carrier.

61. A pharmaceutical composition comprising a receptor according to claim 57 wherein said CDR is CDR3.

62. A pharmaceutical composition comprising a receptor according to claim 58 wherein said CDR is CDR3.

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63. A pharmaceutical composition comprising a receptor according to claim 59 wherein said CDR is CDR3.

64. A pharmaceutical composition comprising a receptor according to claim 60 wherein said CDR is CDR3.

Add I9